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Range: from to Features: SNP CDD MGC HPRD STS tRNA

1: NP_066961. Reports TNF receptor-asso...[gi:22027612]

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LOCUS NP_066961 501 aa linear PRI 27-NOV-2005
DEFINITION TNF receptor-associated factor 2 [Homo sapiens].
ACCESSION NP_066961 NP_663770
VERSION NP_066961.2 GI:22027612
DBSOURCE REFSEQ: accession NM_021138.3
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
Hominoidea; Homo.
REFERENCE
AUTHORS Yang,C.H., Murti,A. and Pfeffer,L.M.
TITLE Interferon induces NF-kappa B-inducing kinase/tumor necrosis factor receptor-associated factor-dependent NF-kappa B activation to promote cell survival
JOURNAL J. Biol. Chem. 280 (36), 31530-31536 (2005)
PUBMED 16009713
REMARK GenerIF: Results for the first time place tumor necrosis factor receptor-associated factor-2 (TRAF2), previously shown to function in TNF signaling, within the interferon signal transduction pathway
REFERENCE
AUTHORS Esparza,E.M. and Arch,R.H.
TITLE Glucocorticoid-induced TNF receptor, a costimulatory receptor on naive and activated T cells, uses TNF receptor-associated factor 2 in a novel fashion as an inhibitor of NF-kappa B activation
JOURNAL J. Immunol. 174 (12), 7875-7882 (2005)
PUBMED 15944293
REMARK GenerIF: In contrast with its effects on signaling triggered by other TNF receptors, functional studies reveal that TRAF2 plays a novel inhibitory role in glucocorticoid-induced TNF receptor (GITR)-triggered NF-kappa B activation.
REFERENCE
AUTHORS Kim,W.J., Back,S.H., Kim,V., Ryu,I. and Jang,S.K.
TITLE Sequestration of TRAF2 into stress granules interrupts tumor necrosis factor signaling under stress conditions
JOURNAL Mol. Cell. Biol. 25 (6), 2450-2462 (2005)
PUBMED 15743837
REMARK GenerIF: TRAF2 colocalizes with eIF4GI in insoluble stress granules during cellular exposure to stress conditions.
REFERENCE
AUTHORS Hauer,J., Puschner,S., Ramakrishnan,P., Simon,U., Bongers,M., Federle,C. and Engelmann,H.
TITLE TNF receptor (TNFR)-associated factor (TRAF) 3 serves as an inhibitor of TRAF2/5-mediated activation of the noncanonical NF-kappaB pathway by TRAF-binding TNFRs
JOURNAL Proc. Natl. Acad. Sci. U.S.A. 102 (8), 2874-2879 (2005)
PUBMED 15708970
REMARK GenerIF: TRAF3 specifically blocked the NF-kappaB activation via TRAF2/5.
REFERENCE
AUTHORS He,L., Grammer,A.C., Wu,X. and Lipsky,P.E.
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JOURNAL J. Biol. Chem. 279 (53), 55855-55865 (2004)
PUBMED 15383523
REMARK GeneRIF: there is a novel association between TRAF2 and TRAF3 that is mediated by unique portions of each protein and that specifically regulates activation of NF-kappaB, but not AP-1
REFERENCE
AUTHORS Zhang,H., Zhang,R., Luo,Y., D'Alessio,A., Pober,J.S. and Min,W.
TITLE AIP1/DAB2IP, a novel member of the Ras-GAP family, transduces TRAF2-induced ASK1-JNK activation
JOURNAL J. Biol. Chem. 279 (43), 44955-44965 (2004)
PUBMED 15310755
REMARK GenerIF: AIP1 is a novel transducer in TNF-induced TRAF2-dependent activation of ASK1 that mediates a balance between JNK versus

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 AUTHORS Vischioni,B., Giaccone,G., Span,S.W., Kruty,F.A. and Rodriguez,J.A.
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 regulate the subcellular localization of cIAP1 and cIAP2
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 PUBMED 15265700
 REMARK GeneRIF: TRAF2 plays an important role as regulator of IAP nucleocytoplasmic localization, by preventing nuclear translocation of cIAP1 and cIAP2.
 REFERENCE 2 8 (residues 1 to 501)
 AUTHORS Fotin-Mleczek,M., Henkler,F., Haussner,A., Glauner,H., Samel,D.,
 Graness,A., Scheurich,P., Mauri,D. and Wajant,H.
 TITLE Tumor necrosis factor receptor-associated factor (TRAF) 1 regulates CD40-induced TRAF2-mediated NF-kappaB activation
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 PUBMED 14557256
 REMARK GeneRIF: stoichiometry of TRAF1-TRAF2 heteromeric complexes ((TRAF2)2-TRAF1 versus TRAF2-(TRAF1)2) determines their capability to mediate CD40 signaling but has no major effect on TNF signaling
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 PUBMED 12842894
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 REFERENCE 4 10 (residues 1 to 501)
 AUTHORS Kaneko,M., Niinuma,Y. and Nomura,Y.
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 PUBMED 12843613
 REFERENCE 5 11 (residues 1 to 501)
 AUTHORS Shi,C.S. and Kehrl,J.H.
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 PUBMED 12591926
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 PUBMED 11907583

REMARK GenerIF: TNF-RII and c-IAP1 mediate its ubiquitination

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 PUBMED 8069916
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 On or before Feb 13, 2004 this sequence version replaced
 gi:22027614, gi:10863939.

Summary: The protein encoded by this gene is a member of the TNF
 receptor associated factor (TRAF) protein family. TRAF proteins
 associate with, and mediate the signal transduction from members of
 the TNF receptor superfamily. This protein directly interacts with
 TNF receptors, and forms a heterodimeric complex with TRAF1. This
 protein is required for TNF-alpha-mediated activation of MAPK8/JNK
 and NF-kappaB. The protein complex formed by this protein and TRAF1
 interacts with the inhibitor-of-apoptosis proteins (IAPs), and
 functions as a mediator of the anti-apoptotic signals from TNF
 receptors. The interaction of this protein with TRADD, a TNF
 receptor associated apoptotic signal transducer, ensures the
 recruitment of IAPs for the direct inhibition of caspase
 activation. BIRC2/c-IAP1, an apoptosis inhibitor possessing
 ubiquitin ligase activity, can ubiquitinate and induce the
 degradation of this protein, and thus potentiate TNF-induced
 apoptosis. Multiple alternatively spliced transcript variants have
 been found for this gene, but the biological validity of only one
 transcript has been determined.

FEATURES Location/Qualifiers

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